

Rancel Hernandez

11/08/2024

Representation and Reporting - D210

Presentation Download Instructions

Tableau Public: To view the presentation, click on the link below to be directed to Tableau Public, where it is hosted. All necessary data sources are included on the Tableau server with the dashboards, so no additional setup is required. If prompted, you may need to create a free Tableau Public account to view the dashboard.

https://public.tableau.com/app/profile/rancel.hernandez/viz/D210_presentation/D10_assessment?publish=yes

Downloading and Opening the Dashboard Locally

- **Download the File:** To download the presentation, click on the link provided above to be directed to Tableau Public where it is hosted. Once there, click on the download option on the top of the page and right of the navigation bar.
- **Download Tableau Reader:** The presentation can be viewed offline through Tableau Desktop or Tableau Reader. If neither is installed, Tableau Reader is recommended as it's free and requires only a simple registration. Click on the link below to download Tableau Reader and follow the instructions to register for an account and download the application.

<https://www.tableau.com/products/reader/download>

- **Opening the File:** After installing Tableau Reader, locate the downloaded presentation file on your device. Right-click on the file, select “Open with,” and choose Tableau Reader (or Tableau Desktop if installed). The presentation should now be fully accessible. The story containing all the dashboards is located at the bottom, labeled “D210_assessment.”

Navigating the Presentation Layout

The presentation is a Tableau Story composed of multiple dashboards. The visualizations and KPI table dashboards showcase the data representations, while the other dashboards summarize the datasets, findings, and actionable insights.

The visualizations dashboard features four main visualizations:

1. **Top Left:** A map of the United States, with donut charts for each state showing the population of non-disabled, disabled, and a specific disabled population. The inner circle of each donut chart displays the average number of days patients spend in the hospital during their initial hospitalization, and includes the percentage of readmitted and non-readmitted patients in each state.
2. **Top Right:** The stacked bar chart displays the average number of initial hospitalization days for each age group, with each bar representing the proportion of readmitted versus non-readmitted patients.
3. **Bottom Right:** A table that shows the count of patients based on selected filter options from the original dataset.

4. **Bottom Left:** A heat map depicting the distribution of disability populations across various age groups in the United States.

The KPI table dashboard features a single visualization:

- A table displaying multiple key performance indicators that compare population types from the two datasets used (medical clean and US Census data). These populations are categorized by disability type and age group for the entire United States.

Setting Up Filters

The dashboards includes six filters:

1. **Readmission Status:** Filters the graphs to show whether a patient was readmitted to the hospital within 30 days of being discharged.
2. **Age Ranges:** Filters the data by age groups based on the United States Census age categories.
3. **Disability Type:** Filters by the primary disability types as reported in the U.S. Census S1810 Disability Characteristics table.
4. **Stacked Bar Chart:** This graph serves as an interactive filter for the other visualizations. Click on a segment of the bar chart to filter by that group, and click again to remove the filter. Please note that filtering through the graph will only apply to the current set of data defined from the filters above.
5. **Top 3 (KPI Table):** Filters the table to show the top 3 states based on readmission rates:
 - **New Hampshire:** 25.38%
 - **Delaware:** 28.24%

- **Arizona:** 28.32%

6. **Bottom 3 (KPI Table):** Filters the table to show the bottom 3 states based on readmission rates:

- **South Carolina:** 45.77%
- **Connecticut:** 43.40%
- **Georgia:** 41.61%

Disability Type Glossary

These definitions are found on the Disability Glossary from the United States Census Bureau.

Ambulatory Difficulty: Having serious difficulty walking or climbing stairs (DPHY).

Cognitive Difficulty: Because of a physical, mental, or emotional problem, having difficulty remembering, concentrating, or making decisions (DREM).

Hearing Difficulty: Deaf or having serious difficulty hearing (DEAR).

Self-care Difficulty: Having difficulty bathing or dressing (DDRS).

Vision Difficulty: Blind or having serious difficulty seeing, even when wearing glasses (DEYE).